WHAT IS CLAIMED IS:

1. A disk drive comprising:

a disk having a recording surface on which a plurality of concentric tracks are arranged at a fixed pitch;

a head arranged in association with the recording surface of the disk and used to read and write data from and to the disk;

means for calculating a first offset value on the basis of the position of a first target track specified by a command from a host, the first offset value reflecting a track pitch which enables adverse effects of crosstalk to be suppressed, the first offset value indicating an offset of a target position at which the head is to be actually positioned from a predetermined position on the first target track in a radial direction of the disk;

means for determining a second target track, to which the target position belongs, and a second offset value on the basis of the position of the first target track and the first offset value calculated by the calculating means, the second offset value indicating an offset of the target position from a predetermined position on the second target track in the radial direction of the disk; and

means for executing control to position the head at the target position on the second target track on

the basis of the second target track position and second offset value each determined by the determining means.

2. The disk drive according to claim 1, wherein:

the head is a composite head;

the recording surface of the disk is divided into a plurality of concentric areas in accordance with an azimuth angle of the head; and

the calculating means calculates the first offset values in accordance with one of the plurality of areas on the recording surface of the disk and the relative position of the first target track in the one area, the first target track belonging to the one area.

3. The disk drive according to claim 2, further comprising means for identifying the one area; and wherein the calculating means calculates the first offset value in accordance with the area identified by the identifying means and the relative position of the first target track in the identified area.

4. The disk drive according to claim 3, further comprising:

a nonvolatile memory which pre-stores a third and fourth offset values unique to each of the areas on the recording surface of the disk, the third offset value indicating a pitch difference between a first track pitch representative of the pitch of the tracks

on the recording surface and a second track pitch

the enables the adverse effects of crosstalk to be

suppressed, the fourth offset value indicating, if

a predetermined track at a predetermined relative

5   position within the corresponding area is the first

target track, an offset of the target position at

which the head is to be actually positioned from the

predetermined position on the first target track in

the radial direction of the disk; and

10   means for reading the third and fourth offset

values corresponding to the area identified by the

identifying means, from the nonvolatile memory; and

wherein the calculating means calculates the

first offset value on the basis of the third and

15   fourth offset values read by the reading means, the

first track pitch, and an offset of the first target

track, the offset of the first target track being

offset from the relative position of the predetermined

track in the area to which the first target track

20   belongs.

5.   The disk drive according to claim 3, further

comprising:

a nonvolatile memory which pre-stores a third

offset value unique to each of the areas on the

25   recording surface of the disk, the third offset value

indicating a pitch difference between a first track

pitch representative of the pitch of the tracks on the

recording surface and a second track pitch the enables

the adverse effects of crosstalk to be suppressed; and

means for reading, from the nonvolatile memory,

the third offset value corresponding to each of areas,

5   the areas ranging from an area to which a leading

track on the recording surface of the disk belongs,

to the area identified by the identifying means; and

wherein the calculating means calculates the

first offset value on the basis of the third offset

10   value read by the reading means, the first track

pitch, and an offset of the first target track, the

offset of the first target track being offset from the

relative position of the predetermined track in the

area to which the first target track belongs.

15   6.   The disk drive according to claim 1, further

comprising another head paired with the head; and

wherein:

the disk has another recording surface

constituting a surface opposite to the recording

20   surface relative to the disk and corresponding to the

another head; and

the calculating means calculates the first offset

value on the basis of the recording surface of the

disk, to which the first target track belongs, and the

25   relative position of the first target track on the

recording surface.

7.   The disk drive according to claim 6, further

comprising means for identifying the recording surface

of the disk to which the first target track belongs;

and wherein the calculating means calculates the first

offset value in accordance with the recording surface

5 identified by the identifying means and the relative

position of the first target track on the recording

surface.

8. The disk drive according to claim 7, further

comprising:

10 a nonvolatile memory which pre-stores a third and

fourth offset values unique to the recording surface

of the disk, the third offset value indicating a pitch

difference between a first track pitch representative

of the pitch of the tracks on the recording surface

15 and a second track pitch the enables the adverse

effects of crosstalk to be suppressed, the fourth

offset value indicating, if a predetermined track at

a predetermined relative position on the recording

surface is the first target track, an offset of the

20 target position at which the head is to be actually

positioned from the predetermined position on the

first target track in the radial direction of the

disk; and

means for reading the third and fourth offset

25 values corresponding to the area identified by the

identifying means, from the nonvolatile memory; and

wherein the calculating means calculates the

first offset value on the basis of the third and
fourth offset values read by the reading means, the
first track pitch, and an offset of the first target
track from the relative position of the predetermined
5   track on the recording surface to which the first
target track belongs.

9.   The disk drive according to claim 7, further
comprising:

a nonvolatile memory which pre-stores a third
10   offset value unique to each of the recording surfaces
of the disk, the third offset value indicating a pitch
difference between a first track pitch representative
of the pitch of the tracks on each of the recording
surfaces and a second track pitch the enables the
15   adverse effects of crosstalk to be suppressed; and

means for reading, from the nonvolatile memory,
the third offset value corresponding to each of the
recording surfaces of the disk from a leading
recording surface to the recording surface identified
20   by the identifying means; and

wherein the calculating means calculates the
first offset value on the basis of the third offset
value corresponding to each of the recording surfaces
of the disk from a leading recording surface to the
25   recording surface identified by the identifying means,
the first track pitch, and an offset of the first
target track from the relative position of the

predetermined track on the recording surface to which
the first target track belongs.

10. A disk drive comprising:

a disk having a recording surface on which a
plurality of concentric tracks are arranged at a fixed
pitch;

a head arranged in association with the recording
surface of the disk and used to read and write data
from and to the disk;

means for calculating a first offset value on the
basis of a pitch difference corresponding to the head
width of the head and the position of a first target
track specified by a command from a host, the pitch
difference being a difference between a first track
pitch representative of the pitch of the tracks and
a second track pitch which enables adverse effects of
crosstalk to be suppressed, the first offset value
indicating an offset of a target position at which the
head is to be actually positioned from a predetermined
track on the first target track in a radial direction
of the disk;

means for determining a second target track, to
which the target position belongs, and a second offset
value on the basis of the position of the first target
track and the first offset value calculated by the
calculating means, the second offset value indicating
an offset of the target position from a predetermined

position on the second target track in the radial
direction of the disk; and

means for executing control to position the head
at the target position on the second target track on
the basis of the second target track position and
second offset value each determined by the determining
means.

11. The disk drive according to claim 10, further
comprising a nonvolatile memory which pre-stores a
third offset value indicating the pitch difference
corresponding to the head width of the head and
wherein the calculating means calculates the first
offset value on the basis of the third offset value
stored in the nonvolatile memory and the position of
the first target track.

12. A disk drive comprising:

a disk having a recording surface on which
a plurality of concentric servo tracks are arranged at
a first track pitch, servo information including
positional information being written discretely at
equal intervals in a circumferential direction of the
disk for each of the servo tracks;

a head arranged in association with the recording
surface of the disk and used to read and write data
from and to the disk; and

means for controlling a data write to the disk
executed by the head, the controlling means

controlling the data write so that the track pitch of
data tracks formed on the recording surface of the
disk as a result of data writes is a second track
pitch which enables the adverse effects of crosstalk
5   to be suppressed.

     13.   The disk drive according to claim 12,
wherein:

     the head is a composite head;

     the recording surface of the disk is divided into
10   a plurality of concentric areas in accordance with
an azimuth angle of the head; and

     the second track pitch is set for each of the
areas on the recording surface of the disk to have
a value reflecting a data write width of the head
15   associated with the azimuth angle of the head, the
second track pitch being equal to or larger than the
first track pitch.

     14.   A method of positioning a head at a target
position on a disk in a disk drive, the disk having
20   a recording surface on which a plurality of concentric
tracks are arranged at a fixed pitch, the head being
used to read and write data from and to the disk, the
method comprising:

     calculating a first offset value on the basis of
25   the position of a first target track specified by a
command from a host, the first offset value reflecting
a track pitch which enables adverse effects of

crosstalk to be suppressed, the first offset value indicating an offset of a target position at which the head is to be actually positioned from a predetermined position on the first target track in a radial

5   direction of the disk;

determining a second target track, to which the target position belongs, and a second offset value on the basis of the position of the first target track and the calculated first offset, the second offset

10   value indicating an offset of the target position from a predetermined position on the second target track in the radial direction of the disk; and

positioning the head at the target position on the determined second target track on the basis of the

15   determined second target track position and second offset value.

15.   The method according to claim 14, wherein:

the head is a composite head;

the recording surface of the disk is divided into

20   a plurality of concentric areas in accordance with an azimuth angle of the head; and

the first offset values is calculated in accordance with one of the plurality of areas on the recording surface of the disk and the relative

25   position of the first target track in the area, the first target track belonging to the one of the plurality of areas.

16. The method according to claim 15, further comprising reading third and fourth offset values corresponding to an area on the recording surface of the disk to which the first target track belongs, from a nonvolatile memory which pre-stores the third and fourth offset values unique to each of the areas on the recording surface of the disk, the third offset value indicating a pitch difference between a first track pitch representative of the pitch of the tracks on the recording surface and a second track pitch the enables the adverse effects of crosstalk to be suppressed, the fourth offset value indicating, if a predetermined track at a predetermined relative position within the corresponding area is the first target track, an offset of the target position at which the head is to be actually positioned from the predetermined position on the first target track in the radial direction of the disk; and

wherein the first offset value is calculated on the basis of the third and fourth offset values read from the nonvolatile memory, the first track pitch, and an offset of the first target track, the offset of the first target track being offset from the relative position of the predetermined track in the area to which the first target track belongs.

17. The method according to claim 16, further comprising:

measuring the third and fourth offset values for each of the areas during a manufacturing stage for the disk drive; and

storing the measured third and fourth offset values for each of the areas in the nonvolatile memory.

18.   The method according to claim 17, wherein the measuring includes:

selecting a track from each of the areas;

allowing the head to write data at a position offset from the selected track in the radial direction of the disk by an amount "the first track pitch+(h-1)* ΔO" (where $\underline{h}$ denotes a variable with an initial value of 1 and ΔO denotes a predetermined fifth offset value);

determining whether a data write executed by the head causes the selected track to be adversely affected by crosstalk;

repeatedly writing the data while incrementing the variable $\underline{h}$ by one until it is determined that the data write executed by the head will not cause the selected track to be adversely affected by crosstalk;

when it is determined that the data write executed by the head will not cause the selected track to be adversely affected by crosstalk, determining twice the value "(h-1)*ΔO" to be the third offset value unique to the corresponding area; and

determining the fourth offset value unique to the
corresponding area, on the basis of the determined
third offset value.

19.   The method according to claim 15, further

5   comprising reading a third offset value corresponding
to each of areas from an area to which a leading track
on the recording surface of the disk belongs to the
area to which the first target track belongs, from
a nonvolatile memory which pre-stores a third offset

10   value unique to each of the areas on the recording
surface of the disk, the third offset value indicating
a pitch difference between a first track pitch
representative of the pitch of the tracks on the
recording surface and a second track pitch the enables

15   the adverse effects of crosstalk to be suppressed; and

wherein the first offset value is calculated on
the basis of the third offset value read from the
nonvolatile memory, the first track pitch, and an
offset of the first target track, the offset being

20   offset from the relative position of the predetermined
track in the area to which the first target track
belongs.

20.   The method according to claim 19, further
comprising:

25   measuring the third offset value for each of the
areas during a manufacturing stage for the disk drive;
and

storing the measured third offset value for each of the areas in the nonvolatile memory.

21. The method according to claim 20, wherein the measuring includes:

5   selecting a track from each of the areas;

allowing the head to write data at a position offset from the selected track in the radial direction of the disk by an amount "the first track pitch+$(h-1)*\Delta O$" (where $\underline{h}$ denotes a variable with

10   an initial value of 1 and ΔO denotes a predetermined fifth offset value);

determining whether a data write executed by the head causes the selected track to be adversely affected by crosstalk;

15   repeatedly writing the data while incrementing the variable $\underline{h}$ by one until it is determined that the data write executed by the head will not cause the selected track to be adversely affected by crosstalk; and

20   determining twice the value "$(h-1)*\Delta O$" to be the third offset value unique to the corresponding area, when it is determined that the data write executed by the head will not cause the selected track to be adversely affected by crosstalk.